

LISTING OF CLAIMS

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

1-4. (CANCELED).

5. (WITHDRAWN) A virus pseudo-nucleocapsid consisting of:

a viral capsid polypeptide, wherein the viral capsid polypeptide is at least the first 124 amino acids of a hepatitis C capsid protein; and

a tRNA molecule, wherein said viral capsid polypeptide and tRNA molecule together participate in formation of a generally spheroid pseudo-nucleocapsid in vitro after which no additional purification step is required.

6. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 5, wherein said viral capsid polypeptide is a flavivirus capsid polypeptide.

7-49. (CANCELED).

50. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in an in vitro array.

51. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 5, wherein said viral capsid polypeptide is a recombinant polypeptide.

52-54. (CANCELED)

55. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 5, wherein said tRNA molecule is selected from the group consisting of hepatitis C virus genome and flavivirus genome.

56. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in an insect cell host.

57. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in an Sf-9 insect cell.

58. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in a mammalian cell host.

59. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in a yeast cell host.

60-74. (CANCELED).

75. (WITHDRAWN) A method of preparing a virus pseudo-nucleocapsid consisting of:

contacting a viral capsid polypeptide with a tRNA molecule, wherein the viral capsid polypeptide is at least the first 124 amino acids of a hepatitis C capsid protein; and

allowing said viral capsid polypeptide and tRNA molecule to participate in formation of a generally spheroid pseudo-nucleocapsid in vitro after which no additional purification step is required.

76. (WITHDRAWN) The method of claim 75, wherein said viral capsid polypeptide is a recombinant polypeptide.

77. (WITHDRAWN) The method of claim 75, wherein inhibitors of virus pseudo-nucleocapsid assembly and disassembly are added.

78. (WITHDRAWN) The method of claim 75, wherein the generally spheroid pseudo-nucleocapsid is crystallized.

79. (WITHDRAWN) The method of claim 75, wherein activators of virus pseudo-nucleocapsid assembly and disassembly are added.

80. (WITHDRAWN) The virus pseudo-nucleocapsid of claim 75, wherein said virus pseudo-nucleocapsid is formed in one of the group consisting of an insect cell host, an Sf-9 insect cell, a mammalian cell host, a yeast cell host, and combinations thereof.

81. (NEW) A virus pseudo-nucleocapsid consisting of:

a viral capsid polypeptide, wherein the viral capsid polypeptide is from SEQ ID NO.: 1; and

a tRNA molecule, wherein said viral capsid polypeptide and tRNA molecule together participate in formation of a generally spheroid pseudo-nucleocapsid in vitro.

82. (NEW) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in an in vitro array.

83. (NEW) The virus pseudo-nucleocapsid of claim 5, wherein said viral capsid polypeptide is a recombinant polypeptide.

84. (NEW) The virus pseudo-nucleocapsid of claim 5, wherein said tRNA molecule is selected from the group consisting of hepatitis C virus genome and flavivirus genome.

85. (NEW) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in an insect cell host.

86. (NEW) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in an Sf-9 insect cell.

87. (NEW) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in a mammalian cell host.

88. (NEW) The virus pseudo-nucleocapsid of claim 5, wherein said virus pseudo-nucleocapsid is formed in a yeast cell host.

89. (NEW) A virus pseudo-nucleocapsid consisting of:

a recombinant viral capsid polypeptide, wherein the recombinant viral capsid polypeptide is from SEQ ID NO.: 1; and

a tRNA molecule, wherein said recombinant viral capsid polypeptide and tRNA molecule together participate in the formation of a generally spheroid pseudo-nucleocapsid in vitro.

90. (NEW) A virus pseudo-nucleocapsid consisting of:

a viral capsid polypeptide, wherein the recombinant viral capsid polypeptide is from SEQ ID NO.: 1; and

a tRNA molecule, wherein said recombinant viral capsid polypeptide and tRNA molecule together participate in the formation of a generally spheroid pseudo-nucleocapsid in vitro;

wherein the virus pseudo-nucleocapsid is formed in an in vitro array.

91. (NEW) A method of preparing a virus pseudo-nucleocapsid consisting of:

contacting a viral capsid polypeptide with a tRNA molecule, wherein the viral capsid polypeptide is from SEQ ID NO.: 1; and

allowing said viral capsid polypeptide and tRNA molecule to participate in the formation of a generally spheroid pseudo-nucleocapsid in vitro.

92. (NEW) A method of preparing a virus pseudo-nucleocapsid consisting of:

contacting a recombinant viral capsid polypeptide with a tRNA molecule, wherein the recombinant viral capsid polypeptide is from SEQ ID NO.: 1; and

allowing said recombinant viral capsid polypeptide and tRNA molecule to participate in the formation of a generally spheroid pseudo-nucleocapsid in vitro.

93. (NEW) A method of preparing a virus pseudo-nucleocapsid consisting of:

contacting a viral capsid polypeptide with a tRNA molecule, wherein the viral capsid polypeptide is from SEQ ID NO.: 1; and

allowing said viral capsid polypeptide and tRNA molecule to participate in the formation of a generally spheroid pseudo-nucleocapsid in vitro, wherein the virus pseudo-nucleocapsid is formed in an in vitro array.